

Indian Standard

(Reaffirmed 2013)

SPECIFICATION FOR
 DETACHABLE PILOTS FOR USE WITH
 COUNTERBORES AND COUNTERSINK 90°
(First Revision)

1. **Scope** — Covers the dimensions and other requirements for detachable pilots for use with counterbores and countersinks 90° conforming to IS : 5710-1988 'Specification for counterbores with Morse taper shanks and detachable pilots (*first revision*)' and IS : 5703-1988 'Specification for countersinks 90° with Morse taper shanks and detachable pilots (*first revision*)'.

2. **Dimensions** — See Table 1.

3. **Material** — Carbon steel with tensile strength of not less than 800 MPa.

4. **Hardness** — 680 HV Min,
 750 HV, Max

5. **Designation** — A pilot having $d_2 = 8$ mm and $d_1 = 22$ mm conforming to this standard shall be designated as:

Pilot 8 × 22 IS : 5705

6. **General Requirements**

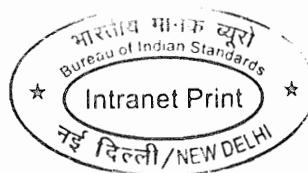
6.1 Recess between pilot and shank shall be according to IS : 3428-1981 'Dimensions for relief grooves (*first revision*)'.

6.2 The provision of dirt grooves are left to the manufacturer's discretion.

7. **Marking** — Pilots shall be marked with designation and manufacturer's name or trade-mark, and month and year of manufacture.

7.1 **Certification Marking** — Details available with the Bureau of Indian Standards.

8. **Sampling** — The sampling and criteria of acceptance shall be in accordance with IS : 7778-1975 'Methods for sampling small tools'.



E X P L A N A T O R Y N O T E

This standard was first published in 1970. In this revision:

- a) dimensions l_1 and l_2 have been revised,
- b) dimension a has been included,
- c) surface finish has been included, and
- d) sampling clause has been included.

In the preparation of this standard, considerable assistance has been derived from:

ISO 4208-1977 'Detachable pilots for use with counterbores and 90° countersinks — Dimensions', issued by International Organization for Standardization (ISO).

DIN 1868-1975 'Detachable pilots for counterbores and countersinks', issued by Deutsches Institut fur Normung (DIN).

Adopted 15 January 1988

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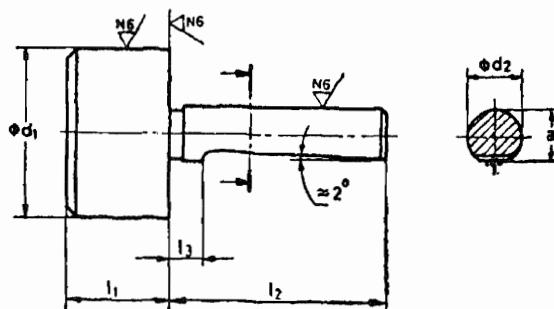
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 NEW DELHI 110002

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 ₹ 890/-
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TABLE 1 DIMENSIONS FOR DETACHABLE PILOTS

(Clause 2)

All dimensions in millimetres.

 $\nabla \quad (\nabla)$ 

d_3 d_7		d_1 e8	a —0.1	l_1	l_2	l_3	For Counterbores Diameter, d_1^*		For Countersinks 90° Diameter, d_3^*	
							Over	Up to and Including	Over	Up to and Including
4	Over	Up to and Including	3.6	5 6 7 8 10	20 23	3 4 3 4	12.5	16	125	16
	5*	6.3								
	6.3	8								
	8	10								
	10	12.5								
6	12.5	14	4.6	6 7 8 10 12	28	4 5 4 5	20	25	20	20
	6.3*	8								
	8	10								
	10	12.5								
	12.5	16								
6	16	18	5.5	7 8 10 12 15	32	4 5 4 5	25	315	25	31.5
	8*	10								
	10	12.5								
	12.5	16								
	16	20								
8	20	22.4	7.5	8 10 12 15 18	40	5 6 5 6	31.5	40	31.5	40
	10*	12.5								
	12.5	16								
	16	20								
	20	25								
10	25	28	9.1	10 12 15 18 22	50	5 6 5 6	40	50	—	—
	12.5*	16								
	16	20								
	20	25								
	25	31.5								
12	31.5	35.5	11.3	12 15 18 22 27	60	6	50	63	—	—
	16*	20								
	20	25								
	26	31.5								
	31.5	40								
16	31.5	45	15.2	15 18 22 27 30	60	6	50	63	—	—
	20*	25								
	25	31.5								
	31.5	40								
	40	50								
16	50	66								

*Includes 5, 6.3, 8, 10, 12.5, 16 and 20 mm also.

†Refer IS : 5710-1988.

‡Refer IS : 5703-1988.